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Avenview

USER GUIDE

HDMI 1.3 Receiver over Signal

CAT5/CAT6

Model #: HDMI-C5-3-R

HD ready 1080p HDMI HDCP 7.1CH Audio X.V.Color

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Section 1: Getting Started

1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
    - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
    - Repair or attempted repair by anyone not authorized by us.
    - Any damage of the product due to shipment.
    - Removal or installation of the product.
    - Causes external to the product, such as electric power fluctuation or failure.
    - Use of supplies or parts not meeting our specifications.
    - Normal wear and tear.
    - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 Safety Instructions

The HDMI-C5-3-R, HDMI 1.3 Receiver over Signal CAT5 has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the HDMI-C5-3-R should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

1.4 Introduction

The Avenview HDMI-C5-3-R HDMI 1.3 Receiver over Single CAT5 Extender boosts up your video/audio transmission distance up to 60m (200ft) in HDTV 1080i format, 40m (130ft) in HDTV 1080p format, and 20m (65ft) in HDTV 1080p with 36 bit color depth. With only one cost effective LAN cable, users can easily extend HDTV sources from DVD players, Blu-ray Disc player, PS3, PC, and any other HDMI sources compliant with TMDS to distant display monitors including HDMI/DVI enabled TV sets or LCD PC monitors. With the state-of-the-art Silicon Image chipsets equipped, deep color video, DTS-HD or Dolby TrueHD audio, and HDCP supports and compatibility are all further insured. This flexibility makes HDCP compliant DVD players or PS3 transmit utmost high quality video and audio with a greater distance at the minimal cost, when integrating several components apart.

The Receiver (HDMI-C5-3-R) equalizes the sent TMDS multimedia data from Transmitter (HDMI-C5-3-S / HDMI-C5XD-S / HDMI-C5XD-SR). The transmission distance between the sending and receiving units can be up to 60m (200ft) under HD (720p/1080i) or 40m (130ft) under Full HD (1080p). With an 8-level equalization control knob on the receiving unit, users can adjust the equalization strength to the received TMDS signals accordingly, and therefore optimize the transmission distance between source and destination.

- Silicon Image chipset embedded for best compatibility and reliability HDMI video input supports up to 1080p resolution
- HDMI 1.3c Compliant
- HDCP 1.1 compliant
- Extend the transmission length up to 60m (200ft) from the HDMI sources under HD resolution (1080i or 720p at 8 bit color depth)
- Extend the transmission length up to 40m (130ft) from the HDMI sources under Full HD resolution (1080p at 8 bit color depth)
- Extend the transmission length up to 20m (65ft) from the HDMI sources under Full HD resolution (1080p at 12 bit color depth)
- Minimize the cable skew by adjustable 8-level equalization control
- Pure unaltered uncompressed 7.1ch digital HDMI over LAN cable transmission
- DTS-HD and Dolby True HD high bit rate audio support
- Allows cascading
- Perfectly integrated with other HDMI-C5-3 Series products

1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

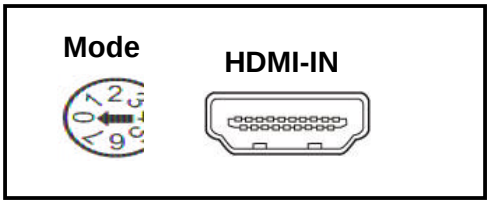
- HDMI-C5-3-R x 1
- Power Adapter (+5VDC, 4A) x 1
- User's Manual x 1

1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

1.7 Panel Description

FRONT PANEL (Transmitter, HDMI-C5-3-S)



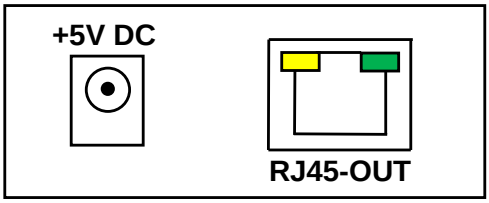
1. Rotary Switch	2. HDMI Input
DIP SWITCH	
0	HDMI Mode with Surround Sound Audio Output
1	HDMI mode with Stereo Audio Output
2	DVI Mode
3	Reserved
4	Reserved
5	Reserved
6	Use Default EDID
7	Learn EDID From the Display

Note for EDID (Extended Display Identification Data) learning

1. Please connect the display which you want to read EDID with a HDMI cable to the transmitter's HDMI-IN and turn Mode to 7 so the TX can learn the EDID information from the connected HDTV. The LED on the RJ45-OUT of TX will dim and light again in a few seconds, which indicates the EDID learning process is completed.

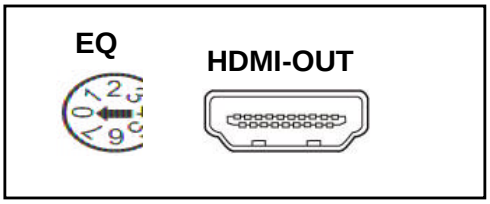
2. Turn Mode clockwise from Mode 7 to Mode 0 or Mode 1 for desirable audio setting and enjoy the experience. DO NOT let the rotary arrow pass by Mode 6 which will erase the EDID just learned and restore the default EDID.

REAR PANEL (Transmitter, HDMI-C5-3-S)



1. 5V 4A DC Power Connector	2. RJ45 Out

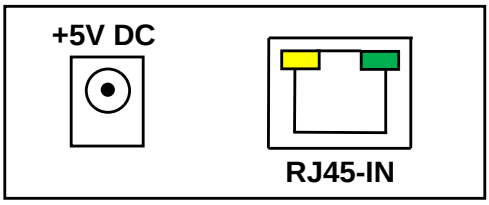
FRONT PANEL (Receiver, HDMI-C5-3-R)



1. Rotary Switch	2. HDMI Out

EQ: Adjust the 8-level equalization control knob to the received HDMI signals.
0 – 7 = Strongest – Weakest.
It is recommended to switch from 7 to 0 to find the optimal visual experience.

REAR PANEL (Receiver, HDMI-C5-3-R)



1. 5V 4A DC Power Connector	2. RJ45 In

1.8 Installation

To setup Avenview HDMI-C5-3-R with HDMI-C5-3-S follow these steps for connecting to a device:

1. Connect your HDMI/DVI source (such as a Blu-ray Disc player) to Transmitter (HDMI-C5-3-S).
2. Connect your HDMI/DVI display (such as a LCD TV) to the receiving unit HDMI-C5-3-R.
3. Connect your CAT-5/5e/6 LAN cable between the transmitting and receiving units.
4. Make sure CAT-5/5e/6 LAN cable is tightly connected and not loose.
5. Plug in 5V DC power cord to the power jack of the receiving unit HDMI-C5-3-R.
6. Plug in 5V DC power cord to the power jack of the transmitting unit HDMI-C5-3-S.

> *If a flickering or a blinking image is seen, try to adjust the rotational switch to improve the cable skew. 0 stands for the strongest EQ while 7 stands for the weakest. Try adjusting the EQ from 7 to 0*

1.9 EDID Learning

To learn EDID from the monitor/TV following these steps

1. Turn on HDMI-C5-3-S.
2. Turn the Mode of HDMI-C5-3-S counterclockwise from 0 (for surround sound) or 1 (for stereo) to 7.
3. Use a HDMI cable to connect HDMI-C5-3-S & the display (better not connect to video source). The LED on the RJ-45 of HDMI-C5-3-S will dim and light again, which indicates the EDID learning process is finished.
4. Turn the Mode of HDMI-C5-3-S clockwise from 7 to 0 (for surround sound) or 1 (for stereo).
5. Connect HDMI-C5-3-S and the video source through a HDMI cable and enjoy the experience.

> *The most important thing is don't let the rotary arrow pass through 6 which will erase the EDID just learned and restore to default EDID.*

1.10 General Troubleshooting

Problem	Possible Solution
No Image	• Check if connection to the source and the display are correct. • Ensure that display device supports 480p, 720p and 1080p resolution
Screen Defects Appear	• This product supports up to 1080p (1920x1200) resolution. • Check the DVI and HDMI connection • If outputting from a PC. Check the maximum resolution range of the graphics card.

Section 2: Specifications

Item	Description	
Units	HDMI-C5-3-S	HDMI-C5-3-R
Unit Description	HDMI 1.3 Transmitter	HDMI 1.3 Receiver
HDMI Compliance	HDMI 1.3c	
HDCP Compliance	Yes	
Video Bandwidth	Single Link 340 MHz (10.2Gbps)	
Supported Resolutions	480i / 480p / 720p / 1080i / 1080p60	
Resolution and Distance (8-bit)	**Full HD:** (1080p) ~40meter (130feet) (CAT5e) / 50meter (165feet) (CAT6) **HD:** (720p/1080i)-50meter (165feet) (CAT5e) / 60meter (200feet) (CAT6)	
Audio Support	Surround Sound (up to 7.1 Ch) or Stereo Digital Audio	
Equalization	-	8 Level Digital Control
Input TMDS Signal	1.2 Volts (peak-to-peak)	
Input DDC Signal	5 Volts (peak-to-peak, TTL)	
ESD Protection	- Human body model — ±15kV (air-gap discharge) & ±8kV (contact discharge) - Core chipset — ±8kV	
Input	1 x HDMI	1 x RJ45
Output	1 x RJ45	1 x HDMI
HDMI Connector	Type A (19 pin female)	
RJ45 Connector	WE/SS 8P8C with 2 LED indicators	
Rotary Switch	Mode	EQ
Dimensions	3.3” X 2.4” x 1” (L x W x H)	
Power Supply	5V 4A DC	
Power Consumption	1 Watt (max)	

Environmental

Operating Temperature	32˚ ~ 104˚F (0˚ to 40˚C)
Storage Tempearture	-4˚ ~ 140˚F (-20˚ ~ 60˚C)
Relative Humidity	20~90% RH (no condensation)

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